

HSE MANUAL

Take your time to read the Manual, and don't
hesitate to ask if you have any questions.

Have a safe day!



SCANEL INTERNATIONAL A/S

June 2023

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#1 IN GENERAL

Scanel International A/S is committed to perform their services and works to the highest standards while ensuring the health and safety of everyone involved and making as little impact on the environment as possible.

Everybody is responsible to contribute to a safe and healthy working environment by eliminating risks or inform the employer or safety and health representative. Everybody is responsible both for their own safety and for the safety of others.

This HSE Manual describes risks, and informs of adequate measures to secure the health and safety of all persons involved as well as the surrounding environment.

Safety at work is improved by following these principles:

1. PLANNING

Always consider what you are going to do, before you begin the work

- The task
- The method
- The tools and equipment

2. ELIMINATING A DANGER

Take action if you recognize anything that might cause a danger to you or anyone else. Eliminate the danger yourself, if it is possible to do so in a safe way. In any case inform your foreman about it.

3. CONFINE A HAZARD

If a hazard cannot be eliminated, it must be confined, e.g., by closing and keeping the fire-proof doors on a vessel closed.

4. ISOLATING

If the risk cannot be eliminated as mentioned above, isolate the risk zone. E.g. safety guards.

5. PERSONAL PROTECTIVE EQUIPMENT (PPE)

If isolating is not a possible option, you should use PPE to avoid the risk. It is the employer's responsibility to provide the necessary PPE.

6. WARNING

It is not enough that you notice the risks at work. Remember also to inform others about them.

SMOKING, ALCOHOL AND DRUGS

Smoking and consumption of alcohol and drugs may cause dangers to you or others.

Smoking is prohibited in all Scanel buildings, cars, and other equipment with a cabin.

Smoking is allowed outdoors at Scanel.

Customer's rules according smoking must always be followed.

Possession or consumption of alcohol or drugs of any kind are prohibited at any Scanel location in any ship or anywhere else whenever wearing Scanel Working clothes.

See the staff handbook to find more details about smoking, alcohol and drugs

THE HEALTH AND SAFETY ORGANIZATION

At Scanel International A/S the Health and Safety management is performed by the Work Environment Organization. The members of this organization are shown in this cart. You may find more information in the staff handbook.

Please contact the members of the organization in case of any doubt or questions concerning the work environment.


WORKING ENVIRONMENT ORGANIZATION

The Working Environment Organisation


The committee consists of the entire working environment organisation





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Juni 2023

#2 NEW EMPLOYEES

A new employee is not familiar with the routines and working methods of a new workplace. That alone triples the risk of accidents.

CERTIFICATES

Each worker must have certain formal competence and valid certificates before starting to work such as:

- Hot work card
- Truck driver license
- Crane Operator certificate
- Electricians: Valid LAUS-certificate
- ISPS Card

TRAINING

Each new worker has to participate in the training sessions at the work place. Topics such as:

- Risk and dangers
- How to use equipment and machinery
- How to handle chemicals
- Traffic arrangements
- Actions in emergency situations
- Environmental impacts
- How to sort waste
- Any task specific training

INTRUDUCTION

- Normally the trade union representative will introduce the new worker to the job
- Otherwise the health and safety representative will carry out the introduction



#3 RISK ASSESSMENT

In order to identify and manage risks before they cause accidents or other damages, risk assessment is a proactive and effective measure.

ITEMS TO BE ASSESSED

- Physical dangers
- Accident risks
- Chemical and biological hazards
- Physical stress
- Social and psychological stress

HOW TO IDENTIFY DANGERS

Identifying risks you should consider

- Dangers that have already led to accidents and near-miss situations
- Potential risks, that have not yet caused accidents, but could cause one
- Potential risks that could harm the workers' health
- Risk criteria from the government regulations
- Good work practices

RISK ESTIMATION

Having identified a risk or hazard it is essential to estimate it according to its consequences and likelihood. That way the most critical risks can be found and measures taken.

This 3-step scale can be used.

HARMFULNESS

- Slight harm: Minor results
- Harm: Long-lasting serious results or results in permanent minor disability
- Extreme Harm: Results in permanent major disabilities, even death

LIKELIHOOD

- Highly unlikely: It occurs only rarely or not regularly
- Unlikely: It occurs repeatedly, but not regularly
- Likely: It occurs often and regularly

	Slightly harmful	Harmful	Extremely harmful
Highly unlikely	1. Non-significant risk	2. Tolerable risk	3. Moderate risk
Unlikely	2. Tolerable risk	3. Moderate risk	4. Significant risk
Likely	3. Moderate risk	4. Significant risk	5. Intolerable risk

TOOL BOX

Before starting any job or task a tool box form is filled in. This is done by the leader of the project in corporation with the involved employees. Every time the crew of the job is increased or the jobs change, a new toolbox talk must be performed. In offshore assignments, the costumers specific toolbox sheet must followed

THE TOOL BOX FORM

Side 1

TOOLBOX TALK CHECKLIST

ScanEl International A/S
 Hovedgade 12
 8260 Skjern, Denmark
 Phone no. +45 88 22 225
 info@scanel.com

Navn (Full name): _____
 Dato: (DD/MM/År): _____

Beskrivelse af arbejdsopgaven (Description of task): _____
 Side nr. (P/VV no.): _____

Aktuel (Current)	Beskrivelse af arbejdsopgaven (Description of task)	Check/Sign
<input type="checkbox"/>	1. Sørg for at værktøj og udstyr er egnet for jobbet (Confirm that tools and equipment are fit for purpose)	<input type="checkbox"/>
<input type="checkbox"/>	2. Diskuter udstyrets sikkerhedsfunktioner og nødvendige tiltag i en nødsituation (Discuss the equipment safety features and the actions necessary in an emergency situation)	<input type="checkbox"/>
<input type="checkbox"/>	3. Diskuter risikofaktorer og APV'er for lignende arbejde og tidligere søger (Discuss RAG/24 for similar work and issue search there)	<input type="checkbox"/>
<input type="checkbox"/>	4. Diskuter og bekræft i gangvarende arbejder der kan være i konflikt (Discuss and confirm conflicting ongoing operations)	<input type="checkbox"/>
<input type="checkbox"/>	5. Sikre sig at arbejdsstedet er tilgængeligt og individuelt ansvar for arbejdet (Confirm individual responsibilities for operation)	<input type="checkbox"/>
<input type="checkbox"/>	6. Sikre sig at nødvendige afbrydere er på plads (Discuss and confirm that necessary energy isolations are in place)	<input type="checkbox"/>
<input type="checkbox"/>	7. Sørg for at informere og tale om nødvendige energisoleringer på plads (Ensure and inform that necessary energy isolations are in place)	<input type="checkbox"/>
<input type="checkbox"/>	8. Sørg for at nødvendige barrierer er på plads – og at de bliver fjernet når arbejdet er færdigt (Ensure that barriers for required areas are in place – and removed when job finished)	<input type="checkbox"/>
<input type="checkbox"/>	9. Sørg for at nødvendige barrierer er på plads – og at de bliver fjernet når arbejdet er færdigt (Ensure that barriers for required areas are in place – and removed when job finished)	<input type="checkbox"/>

Andre risici/kommentarer (Additional hazard / comments): _____

#4 TIDINESS AND ORDER

Everybody is responsible to make sure that the working place is kept clean and in order. Many accidents occur because of clutter on the jobsite. Many fires have started or developed fatal because of untidiness and clutter.

- Tripping
- Slipping
- Falling
- Stumbling
- High-pressure cleaning
- Wire rope hauling

“PRESSURE AND GAS CYLINDERS”

Each department manager is responsible for allotting an area for the placement of pressure and gas cylinders when these are not in use.

MAY EASILY BE PREVENTED BY

- Keeping tools at their designated places when not in use
- Returning useful materials to their proper places
- Disposing of waste, surplus materials and pieces

AND AS ADDED BONUSES

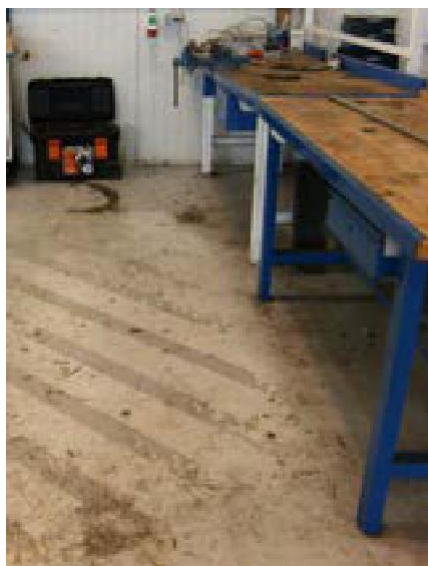
- There is more room to work
- Less time is wasted looking for things
- Assembly times get shorter
- Productivity increases
- The atmosphere at your workplace improves, fewer irritations and accusations
- The working environment as a whole gets more pleasant



An almost tidy stock.



Disorder causes risk of stumbling and complicates the work.



Degrees of tidiness.

#5 COLD AND HOT ENVIRONMENT

COLD ENVIRONMENT

- Be aware of the risk of frostbites if you are exposed to cold for a long time.
- The chill factor (combined effect of wind and frost) may even be hazardous in temperatures about +10°C.
- Wear several layers of clothing
- Remember to protect your cheeks, ears, nose and chin

HOT ENVIRONMENT

- Be aware of the impact heat has on your physical and mental capacity
- Drink enough water during the work approx. ½-1 liter per hour
- Be aware that you lose salt when you sweat, and you must remember to replace it
- Take breaks to shorten the time in the heat



Catalogue of workwear. Find it at the storage office. Here you also find clothes that protect against cold.

#6 LIGHTING

Poor lighting of a work place increases the risk of accident and makes it more difficult to work. That also increases the strain in your back, neck, shoulders etc.

- Make sure your work place has enough light
- It is your own responsibility to obtain extra light if this is necessary.
- Avoid direct glare og unwanted reflections, that strain your eyes and blur you vision
- Carry your own flashlight in vessels and other constructions



#7 NOISE AND PROTECTION

NOISE

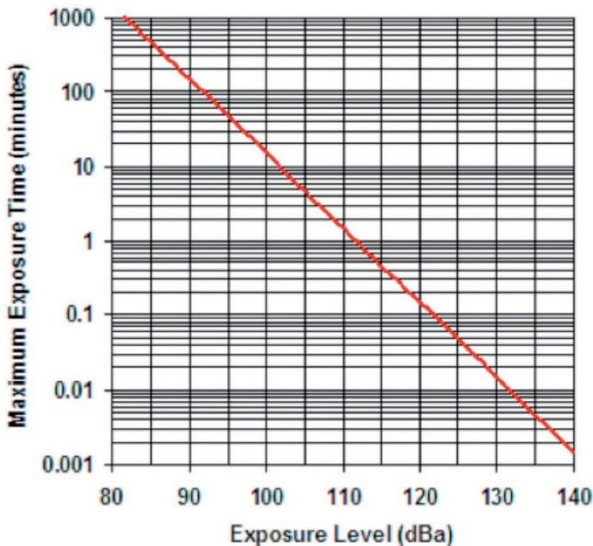
- Exposure to noise for a long time may cause hearing impairment
- Noise such as pounding sounds also causes tinnitus
- Sleep disturbances, impaired ability to concentrate, stress and secondarily social disabilities may also be results of exposure to noise

PROTECTION

- Always use hearing protection when you are exposed to noise above 80 dB
- Always use hearing protection if demanded on signs
- Always use hearing protection if you are exposed to noise that seems harmful

- Be aware that fellow workers may also make noises that can be harmful to you
- There are 2 kinds of protection
 - Earplugs that you can easily bring with you in your pocket. They are normally not as effective as earmuffs
 - Earmuffs provide the best protection. Make sure they sit tightly, also in combination with e.g. safety goggles or hoods
- Use double protection if the noise level is very high

Hazardous noise levels compared to exposure times and the risk of hearing impairment.





Various kinds of hearing protection.

#8 IMPURITIES IN AIR AND PROTECTION

In many work places different types of hazardous impurities in the air are generated according to the various types of work being carried out.

- Inert gases for flame cutting and welding
- Welding fumes
- Smoke and fumes from idle or working vehicles
- Aerosols from spraying processes
- Gases from spray painting, using solvents etc.
- Dust from grinding, cleaning etc.

Depending on the kind of impurity and the duration of exposure there are various kinds of protection

PROTECTION

- Use local exhaust if possible (most important)
- Different kinds of respiratory equipment
 - Respirators with dust filters, gas filters or combined filters. Must not be used more than 3 hours per day.
 - Breathing apparatus when working in spaces where the oxygen content is less than 19%, or the saturation of breathing air with contaminants is extremely high.

All protective equipment that can be used in spaces with a risk of fire or explosion, carry special markings.

REMEMBER
A DUST FILTER DOESN'T
FILTER GASES!



Various kinds of masks and respiratory protection.



Local exhaust placed right over the working area.

#9 PROTECTIVE WORKING CLOTHES

PRECAUTIONS YOU MUST TAKE BEFORE STARTING TO WORK:

- Take off watches and jewelry
- Protect long hair from being caught in equipment
- Don't keep a cigarette lighter in your pocket. Use matches instead

CLOTHING

- Make sure that you wear the right kind and size of clothing with your name and Scanel's name on
- Be aware that your clothes are not ragged which increases the risk of being stuck on rotating parts of machines
- Change your clothes and wash up, if they get dirty during the day. You may be contaminated through the clothes and dirty clothes easily catch fire
- Use fire retardant clothing when doing hot work
- Wash up and change clothes at the end of every day

GLOVES

Protective gloves give you protection against

- Dirt
- Chemical burns
- Radiation from electric arc
- Metal splatter
- Sharp or hot objects

Choose the right glove for the job. Some chemicals penetrate an ordinary glove in a few seconds !

FOOT PROTECTION

To protect your feet against falling objects, sparks, splashes, sharp items etc. always use safety boots or shoes whenever you are at work.

HEAD PROTECTION

Head protection must be worn in all areas where this is directed and/or signposted. It protects you against impacts and bruises.

- Adjust the helmet, leave some empty space between the helmet and the top of your head
- Never paint the helmet or clean it with solvents
- Be aware that the helmet has a limited lifetime. Indoors 5 years, outdoors 3 years
- Replace the helmet if it has been damaged



Catalogue of workwear. Find it at the storage office.

#10 EYE PROTECTION

Many types of work generate potential hazards to the eyes.

- Cleaning with compressed air (particles)
- Grinding and drilling (airborne fragments or splinters). Always be aware of whether there is grinding or drilling going on near you.
- Welding (bright light)
- Removing rust (particles or fragments)
- Handling chemical substances (particles or splashes)
- High pressure cleaning
- Wire rope hauling

Depending on the type of work, use eye shields or eye and face protecting equipment. Always use eye protection if demanded on signs.

- Safety goggles
- Mask
- Visor



Various kinds of eye protection.



Tools and processes that threaten the eyes.



Sign with eye protection required.



**Sikkerhedsbrille
påbudt**

**ALWAYS USE SAFTY GOGGLES
ON ORSKOV YARD.**

#11 ERGONOMICS

Good working posture and proper movements at work are very important for preventing work-related physical injuries and accidents.

IN GENERAL

- Choose working methods that are as safe and cause as little strain as possible to your body
 - Remember to take breaks and stretch your joints and muscles
 - Alternate working positions
 - Avoid or try to minimize the duration of working in extreme body postures, with arms lifted, back bended or twisted, kneeling
 - Organize the work as well as possible
 - Change tasks
 - Use any available technical devices to lighten the strain of the task
 - When doing standing work, be aware of keeping your weight evenly on both feet, or shift the weight regularly. Use good footwear
 - Be aware of how you store goods, tools, materials etc. Heavy loads you are going to handle manually should be stored at a height of 50 cm from the floor
- Get a firm grip
 - Keep your back straight, don't bend or twist
 - Use the muscles of your thighs to lift up the load
 - Avoid carrying, use technical devices if ever possible

DESKWORK

- When working at a desk, remember to take breaks, stand up occasionally and be aware of the adjustment of your working station
 - The height and the backrest of your chair, feet on the floor, hip angle 90° or more
 - The height of your desk, relax your arms and shoulders, don't forward bend your back
 - Adjust your monitor, so your horizontal line of sight is above the top of the screen
 - Put your keyboard and mouse as close to you as possible
 - Avoid direct glare and reflections from windows or lighting, use curtains and tilt the display

MANUAL HANDLING AND LIFTING

- Use the right lifting technique during manual handling
 - Don't hurry, but concentrate on the task
 - Stand close to the load





Use the right technique when lifting.



Useful devices for moving heavy items.

#12 WORKING AT HEIGHTS

Many accidents happen when working at heights. Even a fall from a few meters can be fatal or very harmful.

ELIMINATE THE RISK OF FALLING OR USE PROTECTIVE EQUIPMENT

SCAFFOLDS

- Erect scaffolds with guardrails if there is no other safe way to do the work.
- Only authorized persons are allowed to erect, adjust, move or take down scaffolds.

LADDERS

- Ladders can be used only as temporary passageways or for short-term work, where it is not reasonable to call for scaffolding
- The ladder is not allowed to stand on a scaffold
- Prevent the ladder from falling e.g. by fastening the ladder or letting a co-worker hold the ladder.
- Don't stand on the 2 or 3 upper steps, use them as handgrips
- Be aware of the ladder's condition and inspection tag, and don't use defective ladders. Report to your foreman, and remove the ladder

MOBILE ELEVATING WORK PLATFORMS

- May often be used instead of scaffolding.
- Read and learn the instruction manual.
- Always use safety harness when working on a mobile elevating platform
- Don't leave the platform when it is elevated

PERSONAL FALL ARREST SYSTEMS

- If there is no other way of prevent falling from over 2 meters, use safety harness, e.g. from a hoist platform or cage, scaffold without railing, a roof or a mast.
- Be aware of the condition of equipment. Don't use defective equipment. Be aware of the inspection tag.
- Using an energy absorber, be aware of the amount of space needed beneath the working level.
- Be aware of the anchorage point. Make sure it is strong enough to stop a fall.

BEFORE WORK AT HEIGHT IS INITIATED

Before work at height is initiated, the foreman or project manager must make explicit what kind of protective gear should be used. Each employee is responsible for using the indicated protective gear at all times.



Fall arrest equipment.

IF THE ACCIDENT OCCURS

Stop the accident

Mark or restrict accident space at once, so that no one else can get hurt, and the rescue team have easy and fast access.

Call alarm 112, and inform:

- Your name and phone number
- Address of the accident place
- What has happened - inform if rescue at height
- Agree on meeting place, GPS coordinates is preferable
- Insure that someone go and meet up with the rescue team

Rescue a fall in a fall harness:

A fall with a harness and the associated "hanging phase" can be hard on the body. It can cause physical injuries and extreme loads on the circuits inside the body. Therefore, it is important with a swift and correct rescue.

If the rescue team isn't on site and is too far out, and you have to take action, the following is important.

- Contact the project manager as quick as possible, he has a list over personal who are capable of rescues at height
- Stay close and talk to the injured, take note of and take action if there is any sign of physical chock or malaise, until the professional rescue team arrives.

Right after this contact you closest manager or the Scanel main phone number 96223242 and inform about the accident.

Emergency plans regarding works at heights can be found in the duffelbags with the harness equipment.

After the event of an accident

Psychological help will be offered to the injured, witnesses and others who may be involved.

Harness equipment may not be used again, before it has check, repair and accepted by the provider/maker. Information has to be registered.

An accident report has to be made, and the incident is disused among the working environment group to prevent similar.



Fastening of ladder - a variety.



Scaffold.



Ladders, one of them with an inspection tag. Be aware of the date.



A scissor lifting platform.



#13 FIRE PROTECTION

In any production there is a risk of fire. The smoke produced in a fire is dangerous and harmful.

SMOKE

- Causes the majority of fire related fatalities
- Contributes to panic
- Causes damage to buildings and equipment
- Makes evacuating difficult

PREPARE YOURSELF FOR FIRE

- Learn the emergency procedure, fire protection rules, and hot work rules and instructions
- Learn how to call for help and how to sound the alarm. Emergency numbers are listed in the back cover of this booklet
- Learn how to tackle the fire, using the right method
- Make sure you always know 2 safe escape routes
- Find out and remember where the assembly station is
- Always keep with you a flashlight in case of a black-out during a fire

REDUCING THE RISK OF FIRE

- Keep your working place tidy and in order
- Don't store flammable materials at your working place, keep a supply of no more than what is needed for each day
- Put all garbage in the waste containers
- Make sure that gas hoses not being uses are disconnected from the distribution manifolds
- Always remember to close the valves during breaks and at the end of each day
- Learn the position and how to use fire extinguishers and hydrants
- Do not obstruct access to hydrants or extinguishers
- Be especially aware of the great risk of fire working with open flames or flammable liquids
- Do not leave soldering irons turned on and unattended.



At all Scanel locations you will find these carts that describe the fire exits and the position of fire extinguishers of the specific location.



FLAMMABLE LIQUIDS

- Extremely flammable (e.g. benzene and acetone)
 - Liquids whose boiling temperatures are below 35°C and flashpoint are below 0°C
 - Gases which are combustible when released into air in normal operating circumstances
- Highly flammable (e.g. ethanol)
 - Solid materials that can easily be ignited from a source of ignition and continue to burn even after the source has been removed
 - Liquids whose flashpoint is under 21°C but which aren't extremely flammable
 - Chemicals that release flammable gases when they come into contact with water or humid air
 - Chemicals which are spontaneously flammable in air
- Flammable (e.g. xylene)
 - Liquid chemicals whose flashpoint is between 21 - 55°C

In case of fire

- Keep calm
- Use the closest fire extinguisher
- Switch off the voltage from any electrical instruments before start extinguishing
- Close the closest valve to put out a gas fire
- Restrict the fire by closing fire-doors

- Sound the alarm by using an emergency number from the back cover of this booklet and inform:
 - What is burning
 - Where is the fire
 - Are there any people in danger
- Answer any questions you are asked
- Don't close the line before you are given permission to
- Make a general alarm
- Leave the building or vessel immediately
- Wait for the fire department and direct them to the fire

OTHER ACTIONS

- Always ensure your own way of escape
- Remove any explosive or flammable materials from the space where there is fire
- Switch off fans and ventilation
- Close doors and windows
- Keep calm when getting out of a space filled with smoke, keep low and crawl on the floor
- If your clothes are on fire, throw yourself to the ground and roll over to quench the fire
- Inform that you are safe
- When you hear the alarm leave the vessel or building immediately

#14 HOT WORK

Many fires have started because of sparks or heating from hot work.

The temperature of sparks is approximately 1000°C. After getting darker they still have a temperature of approximately 500°C

BEFORE STARTING HOT WORK

- You must have a valid hot work card
- Find out if it is possible to do the work using other methods to avoid hot work
- Consider whether the hot work could be moved to another location where the risk of fire is less
- Make sure that hot work is permitted in the facility
- Make sure that there is a sufficient number of available extinguishers
- Remove any hazardous materials and items from the work zone. Sparks may fly 10-15 meters
- Keep the workplace neat and tidy. Cover any nearby hazardous materials. Cover openings to neighboring spaces
- Don't get into a tank until the tank has been checked and proved to be risk-free. Provide adequate ventilation
- When necessary arrange a fire guard during and after the work



Protection against sparks at hot work.



Seal that shows the tank is ready for hot work.



A fire guard on his way.

#15 HOISTING

THE CRANE AND LIFTING EQUIPMENT

- The equipment must be intact, have an annual inspection tag (see the illustration) and be designed for the lift you are planning to do.
- Defective equipment must not be used. Return and report it. Cut and throw away broken lifting belts
- It is forbidden to lift people at the same time as the load
- When lifting people, only use equipment that is properly marked for this purpose

THE WORKER

- Do not use a remote controlled crane unless you have been trained for this
- Make sure that you can manage the hoisting work, and arrange any lifting operation with the lift supervisor at the site
- Warn people in the lifting zone, mark the risk zone, isolate and guard it
- No staying or trespassing in the lifting zone
- Do not pass under a hanging load

THE LOAD

- Never overload
- Be aware of the point of gravity when fastening straps or chains. Make sure the load is properly balanced
- Notice that cold and wet weather conditions can make it difficult to get and maintain a secure hold of the load
- Tie the load carefully, and make sure that small items cannot fall from it



Inspection tag on lifting material such as crane or truck.





Different kinds of lifting equipment with colored inspection marks.



Be aware of the cranes on the dock.

#16 EQUIPMENT AND TOOLS

Use your tools and equipment in such a way that they cause no danger to you or others

GENERAL INSTRUCTIONS

- Use only equipment that you are supposed to use and that you have been trained to use
- Replace worn or defective tools
- Don't remove safety guards, instruction plates or warnings signs without replacing them
- Be aware, concentrate and follow the instructions and warnings on any machines, tools or other equipment
- Be aware of the inspection tag on every piece of tool, charger, extension cord etc.

OPERATION

- Fasten the drill-item well
- Never use gloves when operating a pillar drilling machine, a lathe etc. You might get stuck
- Be aware of the risk of breaking the grinding disc on the bench grinder. The discs must be handled with care, and the distance between the tool rest and the grinding disc must be at a maximum of 2mm. This will prevent airborne foreign objects during grinding and items getting stuck between the tool rest and the stone.

MAINTENANCE

- Equipment should be stopped for cleaning, greasing or repair
- After a disconnection of the equipment from the power source, make sure that the equipment can be switched off, before you start working on it



Drilling machine with an inspection tag. Be aware of the date.



Be aware of fast rotating machines.

You might get stuck.



#17 ARC WELDING

Arc welding represent a number of risks and hazards to the workers' health and safety.

RISKS AND HAZARDS

- UV radiation to eyes and skin
- Noise may cause hearing impairment
- Inert gases may take over the oxygen
- Welding fumes contain harmful metals
- Muscular strain from awkward work postures
- Risk of skin contact with poorly insulated cables or defected insulation
- Fire and explosion risks

PROTECTION

- Use a shield with the proper shade of filter glass, not too dark, but dark enough for you to look at the welding arc comfortably. Different jobs may require different filters
- Protect your ears, even during short term welding tasks
- Make sure always to use the local exhaust whenever welding
- Alternate postures, take breaks and be aware of the position of the subject, you are working on in order to minimize the muscular strain
- Always replace defected cables and avoid contact with any parts of the welding power circuit. Be careful with the connections
- Take all necessary precautions in order to prevent fire and explosion
- Always protect cylinders with gas or oxygen from overturning by fastening them carefully



No risk of overturning. Securely fastened.



*Welding produces poisonous fumes.
Here it is not removed.*



Local exhaust could be drawn even closer



*Movable exhaust for welding or
other tasks that produce smoke
or gasses.*

#18 CLOSED AND CONFINED SPACES

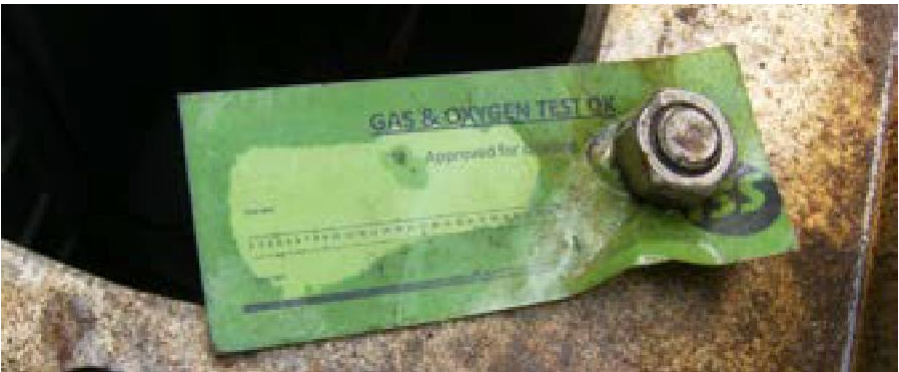
Serious accidents have happened in the ship building industry in different types of tanks, pressure vessels, double bottoms and other confined spaces. It is important to make certain preparations before entering a confined space

RISKS AND HAZARDS

- Explosions caused by confined flammable gasses or gas leaks
- Suffocation from a shield gas
- Suffocation in a space with low oxygen content (maybe it has been closed for a long time, drying of paint etc.)
- Poisoning (e.g. carbon monoxide)
- Electric shock from contact with an electrically charged surface
- Accidents where the structure of the space and/or the type of accident have made the rescue difficult

PROTECTION

- Follow the procedures regarding confined space entry permit. Before entering the confined space make sure that the entrance is marked with a green seal, showing that a relevant test has been made
- It may be required to use electrical equipment with protective extra low voltage (Ex)
- Test the confined space to be sure of sufficient oxygen content
- The person in the confined space must always carry a gas-testing equipment during the stay
- When painting in a confined space with an explosion risk, it is necessary to use an air-line respirator with compressed air system
- When working in a confined space, there must be another person at the immediate proximity ensuring the safety of the worker in the confined space



Green seal that proves the tank is ready for entering.



Gastester. An instrument for measuring the content of various gasses in the air.

#19 ELECTRICAL EQUIPMENT

The most common reasons for fires caused by electrical equipment are:

RISKS AND HAZARDS OF FIRE AND EXPLOSION

- Equipment incorrectly earthed when welding
- Faulty cables
- Fuses that have wrong capacity
- Hot arc and sparks
- Placing the welding pistol during the break in such a way that wire feeding starts unintentionally leading to overheating of wire
- An electrode left in the holder during the break with the power switched on
- Loose joints



Specially designed tools and cases for working with the current on

- Electrical equipment used in spaces where paint thinners, solvents adhesives and fuels are openly handled
- Electrical equipment used in poorly ventilated confined spaces during painting or immediately after painting

AN ELECTRIC SHOCK IS ALWAYS DANGEROUS AND CAN CAUSE VARIOUS DAMAGES

- Injuries to the body (e.g. burns)
- Disorders in the vital function of the body (e.g. the heart)
- Indirect accidents, such as falling down, as a result from being frightened by an electric shock



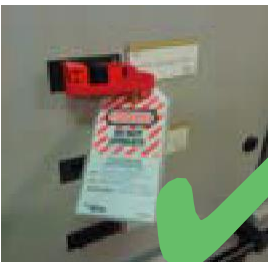
Wrong ways of locking procedure.

LOCKING PROCEDURE OF BREAKERS/ FUSES IN SWITCHBOARD

- Let the ship's electrical or chief engineer advise the correct breaker/fuses to the equipment
- Mount the locking device that fits to the breaker
- Mount your personal padlock on the locking device (and option padlock from ship)
- Put on marking sign with name, date and mobile phone number visible on the padlock
- The padlock may only be removed when the job is finished and installations are ready to power up

PROTECTION

- Always replace and report defective electrical equipment
- Be aware of the inspection tag on every electric device.
- Use Extra Low Voltage when necessary
- Use protective insulation
- Use protective grounding
- Make sure that fault current protection switches are installed when needed
- Use only explosion proof lighting (Marked with Ex) in explosive atmospheres
- Use explosion proof ventilation equipment
- Remember to ground the spray painting equipment



Right ways of locking procedure.

#20 HANDLING CHEMICALS

Many chemicals used in work places are hazardous to the worker's health and safety. Chemical containers are marked if the contents represent a risk to the environment or the work environment.

You must pay special attention to chemicals with these warning signs on the container:

RISKS AND HAZARDS FROM CHEMICALS

- Poisoning
- Inhaling hazardous fumes
- Cauterizing
- Allergy
- Long term effects (e.g. cancer)
- Fire, explosion
- Environmental effects, pollution

ACTIONS

- Always handle chemicals according to the instructions on the container and on the safety sheets. All safety sheets and chemical risk assessments are found in the App "Chemical manager" which is found on your work phone. If you don't have a work phone contact the warehouse personnel, and they can assist you.
- Always use the required protection gear.

PLACEMENT OF CHEMICALS

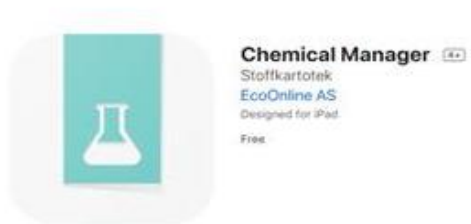
Each department manager is responsible for allotting and maintaining relevant areas for placing chemicals and workplace manuals.

IN CASE OF CHEMICAL ACCIDENT

- Call for help, dial 112
- Inform the medics of the type and name of the involved chemical
- Provide them with the safety sheet, to facilitate the right treatment

IN CASE OF CHEMICAL RELEASE OR ENVIRONMENTAL ACCIDENT

- Call the fire department
- Inform them of the location and name of chemical
- Provide them with the safety sheets
- Warn others and restrict the area if possible
- If possible prevent the accident from spreading, but don't touch the chemical without PPE
- Participate in the follow up regarding information, investigation etc.



CURRENT AND FUTURE RISK SYMBOLS FOR CHEMICALS



Corrosive



Flammable



Irritant



Acute Toxicity



Oxidizer



Explosive



Environmental Hazard



Compressed Gas



Respiratory Hazard



#21 FIRST AID

When an accident has happened it is important to react in the right way and know what to do.

EMERGENCIES

- Find out what happened
- Check response by shaking gently
- Call for help
 - Report what happened
 - Report where it happened
 - Are there any more people in danger
 - Keep calm and answer any questions
 - Don't hang up before given permission to
 - Remember to direct the first aid personnel to the place of accident
- Warn others and prevent any further accidents
- Make sure the injured person is breathing. Don't attempt to move the injured person unless necessary in order to ensure breathing or your own safety
- Open the injured persons airways by tilting his head back
- If breathing is ok, turn an unconscious person to a recovery position
- If the person is not breathing, start CPR with 30 chest compressions. Open the airways and give 2 rescue breaths. Continue alternating these actions
- Stop severe bleeding by applying pressure on the wound
- Continue the first aid procedures until helpers arrive
- There is a AED-Defibrillator at Orskov above the stairs, building no. 18, see the opposite page
- See the next page for further information

ALWAYS CONTINUE FIRST AID UNTIL PROFESSIONAL ASSISTANCE ARRIVES!



The AED-Defibrillator is marked with the yellow circle

OVERVIEW PLAN



HARBOUR OVERVIEW PLAN ///

ISPS

Restricted area.
**Visitors shall report
at the administration office.**
All people shall wear visible ISPS ID.



The area is under
video surveillance.



Parking is forbidden.
Loading and unloading is
allowed.



Hard hat area.
Wear safety glasses.



WWW.ORSKOV.DK

RESCUE EQUIPMENT PLACEMENT

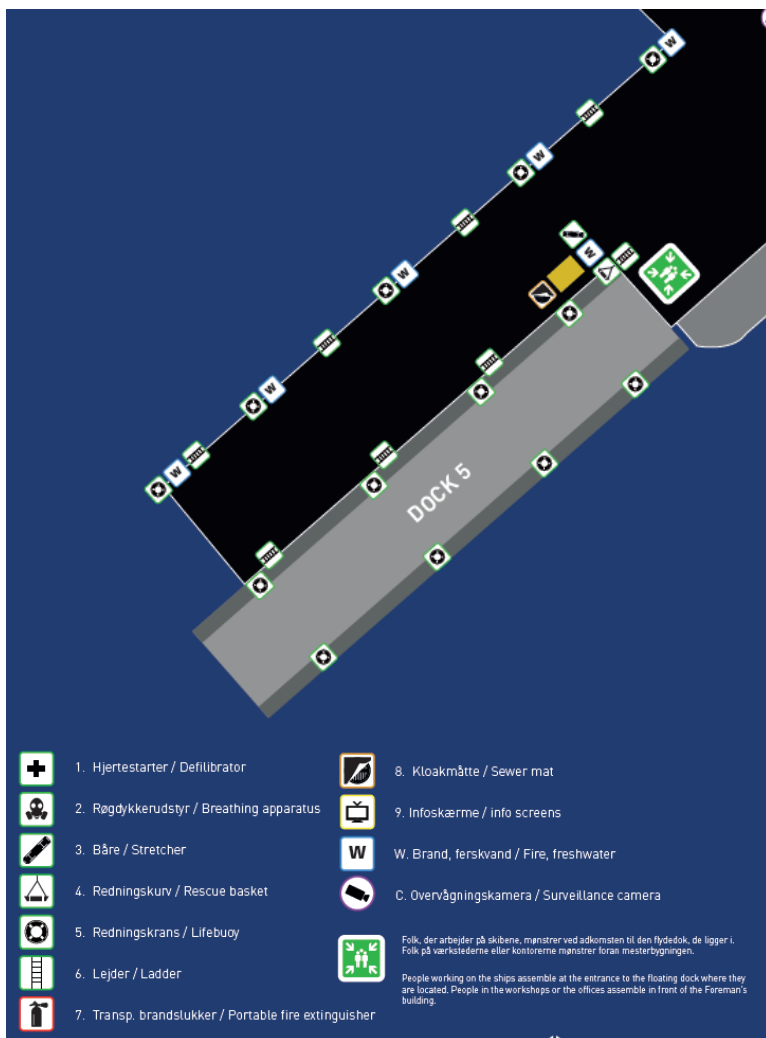
!!! 2. EMERGENCY SOUTH





/// 2. EMERGENCY NORTH





EYE INJURIES

- Foreign bodies, chemical splash or burn in the eye,
 - Do not rub or touch the eye
 - Flush and flutter at the same time
 - Have your eye checked, and tell the name of the chemical

BRUISES, STRAINS AND SPRAINS

- Lift the affected limb
- Apply a cold compress
- Bandage the limb

CUTS AND WOUNDS

- Stop the bleeding by applying pressure on the wound and raise the limb
- By severe bleeding, lay the person down
- Apply a pressure bandage. There are First Aid Kits

BURNS

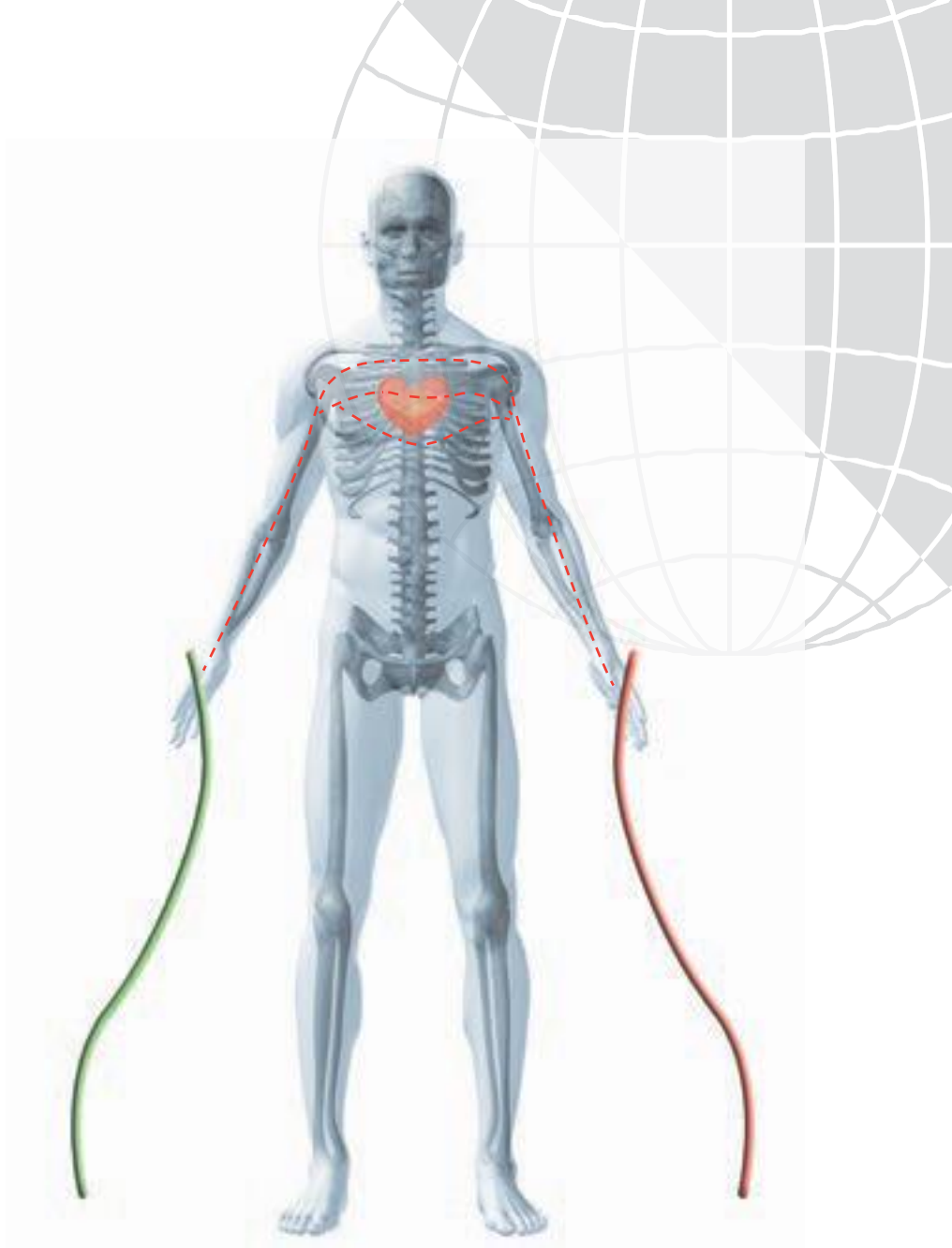
- Smother the fire, if there is any
- Cool the burned area with cold running water for 20-30 minutes. Don't try to remove any clothes
- Cover the injured area with a sterile pad
- Keep the burn victim from being cold
- If the person is badly injured, lay him down to further care

ELECTRICAL ACCIDENTS

- Assess the situation
- Turn off power and separate the victim from the source if possible
- Never touch a victim still connected to the source
- Keep a 5 meters distance to torn cables
- Check the victims state
- Call for help
- Give first aid

ALWAYS SEEK MEDICAL ATTENTION!

Even if the victim has no visible injuries, there might be wounds on the inside. An electrical shock can also cause symptoms of dizziness, thirst, rapid and weak pulse, pale, cold and sweaty skin. It may be fatal if not treated.



*In low voltage accidents the current can pass through the body and the heart.
At high voltage this can cause cardiac arrest.*

#22 REPORTING OF ACCIDENT AND NEAR-MISS

When an accident or a near-miss has happened it is important to report it to your foreman or to the health and safety representative. Both accidents and near-miss situations are to be examined thoroughly to be able to take measures that can prevent it from happening again.

REPORTING

If you have been involved in or have witnessed an accident or a near-miss situation it is your duty to register this in the WORXS app on your mobile phone or bring the information to your foreman or health and safety representative as soon as possible, at least within 5 days after the incident. It can be done in corporation with fellow workers that have

NEAR-MISS & OBSERVATIONS

Reporting of near-misses/Observations. Registers through WORXS app on the mobile phone.

- Possibly. image of incident / area.
- Where the incident occurred.
- Category for near accident/observation.
- Description of incident.

Fill out the form yourself or have a colleague to help you.

ACCIDENTS

Use form 18.006 shown in the opposite page. It can be obtained in the office. You are asked this:

- Your name and department, date of reporting
- Where did the incident take place
- What could have caused an accident, and what happened
- Suggestions for actions that could prevent accidents
- What should be included in the workplace assessment plan (APV)

Fill in the form yourself or let a fellow worker assist you.

ACCIDENT ANALYSIS

All accidents are reviewed at AMO meetings, and once a year in connection with the management review, an overall analysis of accidents and experiences from toolbox meetings will be performed.

TILLØB TIL ULYKKE/ UØNSKEDE HANDLINGER

Scanel International A/S

Nævnst uldte

Navn: _____

Adresse: _____

Telefonnummer: _____

Har du haft ulykker? Ulykker: 0 1 2 3 4 5 6 7 8 9 10

Er du sikker på, at du har været udsat for en ulykke eller en uønsket handling, som kan være skadelig for din sikkerhed?

Sikkerhedsulykke: mangler ikke noget stærkt andet

Sikkerhedsforhold: mangler ikke noget andet

UØNSKET

Er du sikker på, at du har været udsat for en ulykke eller en uønsket handling, som kan være skadelig for din sikkerhed?

Er du sikker på, at du har været udsat for en ulykke eller en uønsket handling, som kan være skadelig for din sikkerhed?

Dato: _____

Navn: _____

Adresse: _____

Telefonnummer: _____

Scanel International A/S



MARK 1

ORIGINAL skal sendes til: **Scanel International A/S**

ADRESSE: **Scanel International A/S**

ACCIDENTS

Use form 18.004, shown at the opposite page, “internal investigation of accidents”. It can be obtained in the office. You are asked this:

- How did the accident happen
 - Was anything different from usual
 - Had planning anything to do with the accident
 - Had maintenance or cleaning any effect on the accident
 - Was personnel sufficiently educated and experienced
 - Had physical organizing of the workplace anything to do with the accident
 - Were there any lack in the safety arrangements
 - Why did the accident happen
 - Which actions should be taken in order to prevent similar accidents

Fill in the form yourself or let a fellow worker assist you.

#23 PROTECTION OF ENVIRONMENT

Scanel International A/S intent to be a responsible company with activities that promote sustainable development.

Through our environmental policy we are committed particularly to be aware of our waste sorting.

WASTE CATEGORIES

- Paper and cardboard
 - Containers marked with a sign: “Pap og papir”
 - In the office plastic garbage bags marked: “papir/pap”. Remember paper only, no food scraps or paper clips. Full bags are emptied in the cardboard container in the storage
- Waste suitable for incineration
 - Containers marked with a sign: “Brændbart affald”. They are for plastic packaging, wood, glass, clothing, waste from the office etc.
- Light bulbs
 - The little blue container outside the cold storage
- Fluorescent tubes
 - The big oblong blue container marked: “Lysstofrør” outside the cold storage. Only fluorescent tubes in it
- Spray cans – both empty and full
 - The little blue containers marked: “Spraydåser” outside the cold storage (also at electro motor workshop)
- Small batteries
 - The yellow bin is placed at the warehouse and at several workshops
- Accumulators with acid contents, e.g. car batteries
 - In a grey box marked: “Scan brit” in the alley next to the storage
- Metal waste
 - In the blue containers outside the cold storage and the electrical workshop. In case of bigger amounts of waste, contact the storage
- Cable waste
 - All types of cables in the blue container at the cold storage and in the electro motor workshop
- Electronic waste
 - Smaller items in the grey plastic container outside the cold storage. In case of bigger items, contact the storage
- Bl. H-waste, dangerous waste
 - In the blue plastic containers outside the cold storage and the electrical workshop
- Rags etc.
 - Rags with waste products that are self-igniting in the blue bin with a lid outside the cold storage
- Plastic
 - Put clean plastic waste in garbage bags

- Oil waste
 - All oil waste is recovered in barrels by the service- and repair workshop. As soon as a single barrel is full, it is to be handed over to Orskov's waste recovery site. Full barrels must not be stored at Scanel
- Epoxy
 - Epoxy and all waste that includes this product is to be put in containers marked: "Epoxy"



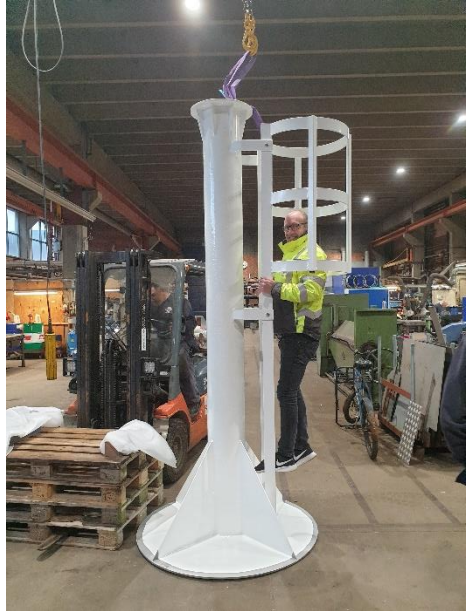
Various containers for different kinds of waste.

#24 MENTAL WORKING ENVIRONMENT

At Scanel International A/S we have an ongoing focus on the mental working environment, so that our employees thrive, and our activities at any time is done with high focus on health and safety. This is achieved by:

- *Responsible planning and organization of the job.*
- *Sufficient and proper training and instruction to do the assignment.*
- *Effective supervision of the jobs execution.*
- *Responsible arrangement of the worksite.*
- *Correct choice of equipment and work methods, with high focus on prevention of work injuries, and limiting physical and mentally wear and tear.*
- *Possibility of support from both management and colleagues.*
- *Possibility of influencing the work at hand, and how it is to be done.*
- *Visibility through communication*
- *Workplace assessments and Well-being surveys*

All this is to prevent risks, evaluate risks which can't be prevented and fight other risks which can have influence on the health and safety of our employees.



FIRE AND EVACUATION INSTRUCTION

FME BUILDINGS 10, 11 & 20

IN CASE OF FIRE

Alert all employees and tenants

ALARM

Call rescue service

- Call 1-1-2 and inform the emergency dispatch centre
- Where is the fire?
- What is on fire?
- Is anyone injured?

RESCUE (EVACUATE BUILDING)

- Make sure everyone leaves the building through emergency exits and gathers between buildings 11 and 21 outside of the warehouse
- Provide first aid to anyone injured

EXTINGUISH FIRE (IF IT CAN BE DONE SAFELY)

- Close all doors and windows with access to the area on fire
- Attempt to extinguish fire with the fire safety equipment at hand

ARRIVAL OF RESCUE SERVICE

Upon rescue service arrival employees report about location of the fire, extent of the fire, people injured, and people not yet brought to safety.

IMPORTANT TELEPHONE
NUMBERS IN CASE OF
EMERGENCY

RESCUE

112

FIRE DEPARTMENT

112

POLICE

114

QHSE RESPONSIBLE

+45 2222 5233

CEO

+45 2222 5330

COO

+45 2222 5256

HR

+45 2523 4525

SCANEL MAIN TEL . NUMBER

+45 9622 3242

SCANEL WATCH TEL NUMBER

+45 2297 3242

